

Finally, the Air Force's drawdown in the number of people overseas will not be complete by 1995. Personnel stationed overseas receive higher benefits than those in the continental United States. The costs of moving personnel from overseas assignments to the United States may also be higher in 1995.

CBO assumes that the real level of personnel funding will remain roughly constant at the 1999 level through 2010. This assumption seems consistent with the Clinton Administration's estimate of the forces it needs. The Administration plans to cut forces to Bottom-Up Review levels by 1999. CBO assumes that the Air Force structure would remain constant at those levels through 2010.

Operation and Maintenance

Operation and maintenance (O&M) appropriations constitute most of the rest of the Air Force's operating costs. O&M funds pay for such items and activities as civilian pay, fuel, medical expenses, and maintenance of equipment and facilities. Air Force O&M funding totaled about \$29 billion in 1990 and is scheduled to decrease to about \$23 billion in 1995. O&M funding in the Administration's plan is scheduled to decrease by about \$3 billion more by 1999.

Because most major force changes should be complete by 1999, CBO assumes that the real level of O&M appropriations will stay constant at the 1999 level through 2010. There is, however, much uncertainty about projected O&M funding, particularly in the next decade. By that time, new pieces of equipment (including the F-22 fighter and C-17 aircraft) would have entered the inventory in substantial numbers. The Air Force has argued that the new equipment has been designed to hold down maintenance needs, which could reduce O&M costs. But previous patterns--at least for fighter aircraft--do not provide much support for this argument. Besides, some of the new capabilities of the F-22, such as stealth and supercruise, may increase, rather than decrease, maintenance requirements. Also, new weapons are generally more complex than those they replace, which could add to O&M costs.

Total Operating Funds

In addition to funds for military personnel and operation and maintenance, the Air Force operating budget includes a small amount of money to provide family housing. Including these funds, the total bill for the operating accounts is expected to decline from \$55 billion in 1990 to \$44 billion in 1995. Operating funding would drop further under the Administration's plan, to

about \$38 billion by 1999. CBO assumes that operating funding in all categories will remain constant in real terms beyond 1999 at the 1999 level of \$38 billion.

PROCUREMENT FUNDING

Another large portion of the Air Force budget pays for the purchase of major weapon systems, such as the C-17 airlift aircraft, and other items such as trucks, radios, and spare parts. In 1990--when procurement funding totaled \$34 billion, or about 32 percent of the total service budget--the Air Force received funding to buy two strategic bombers (B-2s), 186 tactical fighters, four C-17s, and 12 intercontinental ballistic missiles. By 1995, purchases of such major systems--defined by CBO as combat and airlift aircraft and ballistic missiles--had dropped to six C-17s.⁹ The Air Force will add another program to the major acquisition category in 1998 when the F-22 enters procurement. Even with this added program, however, the share of funding devoted to major systems will be considerably lower during the 1995-1999 period than it has been in the past. These curtailments in major programs have substantially reduced the funding in the Air Force's procurement accounts. By 1995 procurement funding is scheduled to decline to \$18 billion, only slightly more than half the 1990 level. The Administration expects to spend more on procurement in the 1995-1999 period. Funding would increase to about \$22 billion by 1999, a rise of more than 20 percent, reflecting additional money for the F-22, the Joint Primary Aircraft Training System (JPATS), and the Tri-Service Standoff Attack Missile (TSSAM).

The F-22 is currently in its development phase. As a result, there is no procurement funding for the program in 1995. In 1999 the Air Force expects to spend more than \$1 billion of its procurement account on the program. The Air Force also wants to spend about \$280 million to buy 48 trainers for fledgling pilots (JPATS) in 1999, up from \$120 million for three in 1995. TSSAM, a stealthy cruise missile that the Air Force and Navy are buying to add to the ground-attack capabilities of fighter and bomber aircraft, is budgeted at about \$50 million more in 1999 than in 1995: in 1995 the Air Force requested about \$380 million to procure 48 missiles, but missile procurement would increase to 270 by 1999, and Air Force plans project that costs will rise to \$420 million. The conference authorizing the fiscal year 1995 budget would delay this program. Conferees have eliminated all procurement funding, arguing that the program is not ready to be bought yet.

9. The Air Force's 1995 budget also includes funding for purchases of two E-8 (JSTARS) reconnaissance aircraft and three JPATS trainers.

As with operating costs, some portion of the Air Force's procurement budget is devoted to classified programs. The Air Force has suggested that almost half the 1995 procurement budget (about \$8 billion of the \$18 billion funding request) funds classified programs and provides dollars for the Special Operations Command and the Defense Airborne Reconnaissance Program.¹⁰ By 1999, perhaps \$7 billion or more of the Air Force's planned \$22 billion procurement budget for 1999 might be devoted to intelligence funding, special operations, and airborne reconnaissance. Thus, it is possible that the addition of funding for these other programs will obscure very large percentage increases in Air Force procurement funding. But in absolute terms, it also suggests much lower funding for procurement programs in the Air Force proper.

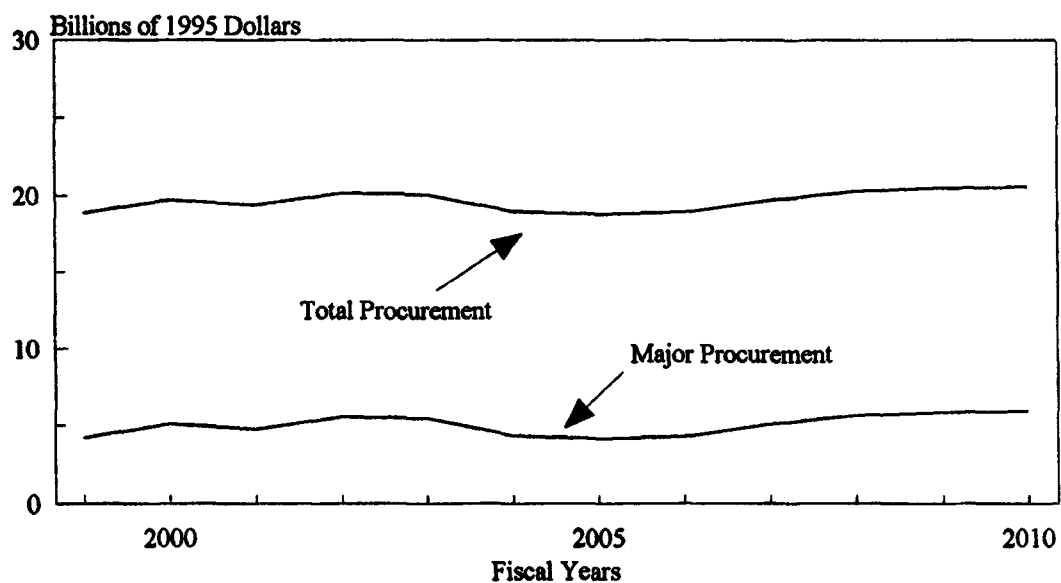
In the first decade of the 21st century, the pattern of funding depends on assumptions about the costs of various major weapons, particularly tactical fighters, and trends in costs for other armaments. Estimate A--which assumes that steps would be taken to hold down costs--projects that procurement would decline to about \$20 billion in 2000 (see Figure 3). Procurement would then remain at approximately that level in 2002 and 2003, when CBO assumes that the Air Force would still be buying the C-17 and purchasing the F-22 at peak rates. Funding would dip modestly to about \$19 billion in the 2004-2006 period before rising to \$21 billion at the end of the decade, when CBO assumes JAST purchases will begin. Annual procurement funding for the 2000-2010 period in Estimate A averages about \$20 billion, about \$2 billion less than the 1999 funding level. This estimate suggests that the Air Force could absorb modest real decreases in its procurement accounts and still support its program.

Under the assumptions of Estimate B, which are more consistent with past experience, procurement funding would remain near \$22 billion in 2000 and rise rapidly to about \$26 billion in 2002 and 2003 as F-22 procurement increases and the service is still buying C-17s (see Figure 3). It would decline in the middle of the first decade of the 21st century but rise sharply toward the end, reaching a peak of \$27 billion in 2009, the last year of F-22 procurement under CBO's assumptions. On average, annual funding would total \$25 billion for the 2000-2010 period. These trends reflect costs for all systems.

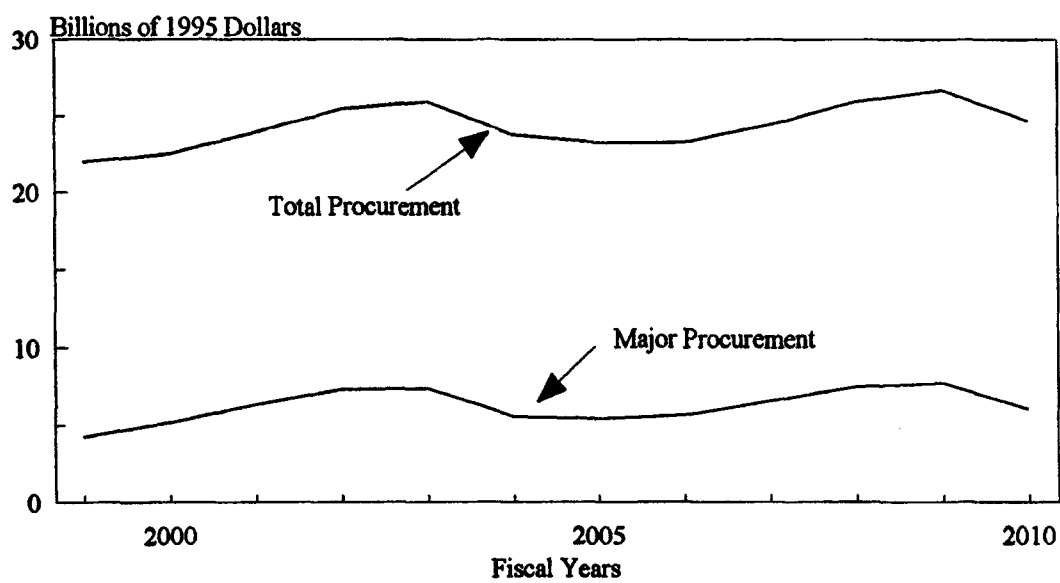
10. "Air Force Fiscal Year 1995 President's Budget," a presentation to the Congressional Budget Office by the Air Force on February 25, 1994. The Air Force may have operational control of some of the funds in these categories, though it will probably not control decisions about acquisition. The Air Force did not provide detailed estimates for funding that excludes these categories for the years beyond the budget, but it did provide a pictorial representation of its funding beyond 1995.

FIGURE 3. MAJOR AND TOTAL PROCUREMENT IN THE AIR FORCE BUDGET

Estimate A



Estimate B



SOURCE: Congressional Budget Office.

Major Weapons

CBO bases both of its estimates on the number of major weapons to be bought under the Administration's plan.

Estimate A. In most cases, the lower estimate of costs assumes that new major weapon systems can be purchased at the unit costs currently estimated by the Administration. These unit costs suggest, for example, that F-22 aircraft would cost about \$90 million apiece and C-17s cost \$260 million (see Table 1).

In one important exception to CBO's rules, the lower estimate of costs is not based on the Administration's estimate of unit costs. The Administration has not estimated the cost of the plane that would emerge from the JAST program to replace the F-16. In Estimate A, CBO assumes that each fighter might cost about \$35 million.

The JAST program replaced several development efforts in the services. Before JAST the Air Force planned to develop a multirole fighter to replace its F-16s. The Air Force argued that each multirole fighter might cost from \$25 million to \$35 million (in 1994 dollars), depending on the capabilities it offered. Experience suggests that the planes of successive generations cost at least 80 percent more than their predecessors. A cost of \$25 million for the new fighter would represent only about a 10 percent increase above the

TABLE 1. AVERAGE UNIT PROCUREMENT COSTS FOR AIR FORCE SYSTEMS (In millions of 1995 dollars)

Aircraft	Estimate A	Estimate B
F-22	90	120
JAST	35	55
C-17	260 ^a	260 ^a

SOURCE: Congressional Budget Office based on Department of Defense data.

NOTE: Unit costs are rounded to the nearest \$5 million.

a. \$295 million including sunk costs in 1994 and previous years.

average price of an F-16. Such a small increase would fall substantially below the historical minimum and would raise the question of why, if changes are to be so modest, the Air Force plans to design an entirely new plane.

In order to provide a more realistic estimate of minimum costs, CBO assumes that the F-16 replacement will cost about \$35 million apiece--about equal to the higher of the Air Force's two estimates. This would represent an increase of about 50 percent above the cost of today's F-16 aircraft; substantially less than the smallest increase in the price of a newly designed plane compared with the price of its predecessor, at least since the 1950s. In addition, it seems unlikely that the Air Force will be willing to do without at least some enhancements in capability that increase the cost of new aircraft. For example, former Air Force Chief of Staff General Merrill McPeak has suggested that stealth technology will be incorporated in all new combat aircraft.¹¹

Under the assumptions included in the lower estimate, the costs of major procurement would increase from about \$4 billion in 1999 to around \$6 billion in 2002 and 2003 and then fall back to about \$4 billion before rising to about \$6 billion at the end of the decade (see Figure 3). Almost all of the costs are associated with tactical aircraft. CBO assumed that there would be no costs associated with buying strategic aircraft or missiles throughout the period, since the Air Force has announced no plans to do so. After C-17 purchases are completed in 2003, tactical aircraft procurement will account for all major procurement funding.

Estimate B. If history is a guide, the unit costs of weapons used in arriving at the lower estimate are too low. In the past, the actual costs of weapon systems have increased above initial estimates, often by substantial amounts. Thus, this analysis includes higher estimates of Air Force procurement costs that assume that the costs of the F-22 fighter and JAST aircraft increase.

Estimate B assumes that costs of the F-22 aircraft will rise to a level of about \$120 million, roughly 30 percent higher than the Administration's current estimate (see Table 1). The higher F-22 cost is based on previous patterns. Specifically, this estimate applied the ratio between the average costs of the A/B models of the F-15 and the cost of the F-4, its predecessor, to the costs of the F-15. Some of this assumed growth must have already begun. F-22 unit prices have risen steadily in recent years as the plane nears production.

11. "McPeak: Soviets Can Detect B-2, But No Defense Against Stealth," *Aerospace Daily*, October 10, 1991, p. 62.

The higher cost of \$55 million for the JAST is based on Air Force estimates of the cost of an F-21++, a radically modified version of the F-16 considered as an alternative to the F-22 aircraft. The F-21++ had substantial stealth capability and also greater range and enhanced avionics, and in fact might have had more capability than the Air Force expects out of the JAST program, which is slated to develop a replacement for the relatively less capable F-16 aircraft. Despite these differences, the F-21++ may be a good proxy for JAST progeny, because of its stealth capability and relatively modest cost. Stealth is an important improvement in capability, the Air Force argues, and the F-21++ aircraft would have stealth capability. Also, \$55 million may be consistent with the \$35 million cost that was at the higher end of the Air Force's range of estimates for its canceled multirole fighter program. The Air Force may have expressed its estimates for future fighter prices in "fly-away" costs. Fly-away costs do not include funding for many items paid for out of procurement accounts. They represent perhaps 60 percent of required procurement funding for tactical aircraft.

Under the assumptions of the higher estimate, procurement costs of major weapons would rise from about \$4 billion in 1999 to more than \$7 billion in 2002 and 2003. They would drop to about \$6 billion in the 2004-2006 period and climb to almost \$8 billion toward the end of the decade.

Uncertainty About Aircraft Procurement

Both cost estimates assume that the Air Force purchases the same number of aircraft. There are, however, two major questions about the number of planes the Air Force will buy: Will more B-2s be bought, and what will the schedule be for the JAST program?

The Future of the B-2. For the purposes of this analysis, CBO assumes no further purchases of B-2 aircraft. The assumption is reasonable because the analysis seeks to investigate the implications of the current Administration's plans and because the Administration has not requested continued B-2 procurement. There is, however, some uncertainty about whether the bomber forces in the Bottom-Up Review are fully supported by the planes in the plan. The Bottom-Up Review assumes that the United States must prepare to fight two regional conflicts that break out at almost the same time. The review derived force goals for a single conflict. It estimated that a force of 100 long-range bombers armed with conventional weapons would be needed to provide attack capability early in a conflict, before ground forces could arrive. Some have taken this estimate to mean that 100 bombers would be needed for each conflict, and that the review requires fielding 200 planes for conventional missions, rather than the approximately 100 specified in the Administration's

plans.¹² But again, the Administration assumes that the two conflicts would not begin simultaneously. Thus, some of its leaders have argued that the bombers could fight in one conflict and then fly to another region where war has broken out. Therefore, they argue that the planes in the President's budget would be sufficient.

The Senate Armed Services Committee--not persuaded by the suggestion that bombers could be transferred to a second conflict if it broke out--advocated preserving the capability to buy bombers. Some members of the Congress have discussed buying additional B-2s. The House Armed Services Committee, however, opposed continued B-2 purchases. The conferees provided \$125 million in the 1995 budget to study requirements for bombers, preserve the bomber industrial base, or explore concepts for a new bomber. The conferees left the final decision of disposition of the funds up to Secretary of Defense William Perry. If Secretary Perry decides to request continued B-2 procurement in next year's budget, substantial additional funds must be found. CBO estimates that buying 20 more B-2s, for example, will cost about \$26 billion more than the funding in the current plan--\$10.3 billion more during the 1995-1999 period and \$15.7 billion in 2000 and beyond.¹³ If Secretary Perry decides to continue B-2 procurement it is likely that he will find trade-offs for some or all of this funding. If he trades off funding by canceling other Air Force programs, added purchases of B-2s might not change the future cost outlook. And if more money is added to Air Force budgets, it will increase funding in 1999, the year CBO compares with its estimates of annual funding in the 2000-2010 period. Conversely, if other Air Force programs are deferred to fund the B-2, the decision to buy the plane will add to long-term budget pressures.

The Administration may have reduced the pressure for additional B-2 purchases, since the bomber forces in its new Nuclear Posture Review are larger than those in its budget. This is the result of retaining older B-52s and B-1s in operational status, however, so implications for future bomber purchases are not clear.

JAST Schedule. CBO also assumes that to replace older F-16 aircraft the Air Force would buy about 120 planes of the model that is expected to emerge from the JAST program during the latter part of the next decade. That schedule would leave the Air Force with sizable shortages of the planes that

12. The review suggests that the Air Force in 1999 would contain "up to 184 bombers (B-52H, B-1, B-2)." It also suggests that strategic nuclear forces would contain up to 94 B-52s and 20 B-2s. Department of Defense, "Report on the Bottom-Up Review," p. 28.

13. The selected acquisition reports contain about \$3 billion for the B-2. CBO estimates that an additional \$26 billion will be needed if 20 more B-2s are bought.

make up the multirole mission, unless service lives are extended. In order to meet mission level requirements, the Air Force must retain about 18 percent of the multirole fleet beyond expected retirement dates. Furthermore, planes in that fleet will be an average of about 22 years old, more than double the Air Force's expressed goal of about 11 years for tactical fighters. In fact, the average age of the fleet will equal the Air Force's stated fighter retirement goal of 22 years.

It is possible, however, that diminished threats to U.S. security will permit the Air Force to retain its F-16 aircraft much longer than 22 years. That figure is based on the assumption that after about 22 years, maintaining technological superiority over potential enemies would require a new plane. It seems highly unlikely that any country now viewed as a threat could develop planes rivaling the capabilities of today's U.S. aircraft and field them in significant quantities.

Nonmajor Procurement

In addition to buying major weapon systems, such as strategic bombers, tactical fighters, and intercontinental ballistic missiles, Air Force procurement budgets pay for other items, such as satellites, communications equipment, trucks, bombs, and spare parts. Many of these items represent relatively small amounts of money. For example, the "other procurement" account in the 1991 budget request contained almost 200 line items, only four of which cost more than \$100 million.

Detailed plans for many of these weapons are not generally available to the public. Thus, the costs of nonmajor procurement cannot be estimated in the same way as those for major weapon systems. Instead, CBO's estimates of nonmajor procurement are based on general relationships that differ between Estimates A and B.

Under Estimate A, CBO assumes that the real level of spending on nonmajor procurement would increase so that, by 2003, this category of funds would receive roughly the same amount of money, reduced in proportion to cuts in forces, that it received on average in the 1974-1994 period. CBO used the number of active-duty military personnel as a proxy for forces, which may be reasonable over the long run, although short-run changes in end strength may not vary in proportion to force size. This premise is consistent with the assumption that total spending for nonmajor procurement should be related to the number of forces and the amount spent on it in the past.

Estimate B reflects historical funding patterns for nonmajor procurement. Specifically, CBO has used a regression equation derived from the relationship between funding for minor and major procurement for the 1974-1999 period.¹⁴ The relationship is statistically significant and suggests that some procurement funding for minor weapons would increase in proportion to changes in costs for major weapons, while other funding would not be affected by the level of major weapons funding.

This statistical relationship may be consistent with the nature of the systems purchased with these funds and with the overall acquisition process. Some weapon systems bought with these funds, such as advanced munitions, satellites, radar, and some communications gear, share the same kinds of sophisticated technology that increasingly drive up the costs of major systems. Moreover, it is reasonable that the missions performed by these so-called minor systems will remain valid and thus require the same commitments of resources as do major systems. Thus, the availability of funds for procurement could be expected to have similar consequences for the amounts devoted to major and at least some minor systems.

Other categories of systems purchased with funds for nonmajor procurement, such as trucks and fork lifts, should not need to be replaced as threats change and should not necessarily increase in cost. But many of these systems continue to be procured, and previous levels of expenditure are a plausible guide to future spending, as the regression relationship finds.

The higher estimate of the costs of nonmajor procurement may also be consistent with the potential for growth in the number and cost of space-based assets. As the United States comes to rely more heavily on space for communications and other military purposes, the costs of assets related to activities in space could rise. Because the long-term plans for deployment of these systems are highly uncertain, highly classified, or both, these systems are included as nonmajor procurement items. Sharp growth in the cost of these systems would push the Air Force budget toward the assumptions of Estimate B.

Changes from Past Patterns in Plans. One pattern in the Administration's plans may cast doubt on whether either of these methods--both heavily dependent on the past to predict the future--produce high enough estimates. In the past, major procurement, as defined by CBO, has absorbed about 30 percent of Air Force procurement budgets. The Administration plans that it will take up only about 20 percent of those budgets over the 1995-1999 period.

14. The equation used to project procurement funds is $\text{Minor}_t = 1.9 + 0.4 (\text{Major}_t) + 0.7 (\text{Minor}_{t-1})$. The numbers in parentheses are T-statistics. (2.4) (7.8)

If, on the one hand, this simply reflects today's procurement holiday, regression equations and funding averages may be perfectly acceptable projection methods for the longer term.

On the other hand, the composition of procurement accounts may be changing. The Air Force may be investing more heavily in space programs and other areas of the budget, whose classification levels make it difficult to project them separately in unclassified documents such as this one. Funding for the intelligence community may also affect the changing percentage. As discussed earlier, if intelligence community funding, which--along with funding for several programs coordinated outside the Air Force--makes up more than half of Air Force procurement funding, declines less rapidly than procurement for Air Force programs, the share of total procurement funding allotted to minor procurement may increase.

CBO has attempted to incorporate this trend into Estimate B by including the 1995-1999 period in its calculations. But the Administration's plan represents only five years--and data points--out of 25. Hence, the new pattern does not dominate the equation. This issue--while representing a swing of only 10 percentage points--has a substantial impact on estimates. Assuming that major procurement continues to represent 20 percent of the budget, as it does during the 1995-1999 period, annual Air Force procurement funding requirements would average about \$32 billion during the 2000-2010 period, approximately \$7 billion more than the average over the same period in CBO's higher estimate.

RDT&E and Military Construction

After the costs of operations and procurement, the remaining appropriations in the Air Force budget include research, development, test, and evaluation (RDT&E) and military construction. The Administration's plan predicts that RDT&E will decline dramatically in real terms through 1999 (see Table 2). In its 1995 budget request, the Administration asked for only half of the funding provided for military construction in 1994. But the Administration expects the account to regain some of its funding during the 1996-1999 period. In Estimates A and B, CBO uses two approaches to project spending beyond 1999 for RDT&E. Both estimates for military construction assume it remains constant at its 1999 level in real terms, because it represents a small portion of the budget. As a result, even large percentage swings in its value have little impact on estimates of total funding.

Estimate A assumes that RDT&E receives the average amount of funding that it received in the 1974-1994 period, adjusted by the number of

The use of historical patterns in estimating future funding may also be consistent with the uncertainty about requirements for these appropriations. It takes a decade or more for an investment in RDT&E to produce a new weapon. Thus, funding requirements for RDT&E are highly uncertain because threats to U.S. security 10 or 20 years from now are unpredictable. In periods when the total Air Force budget grows, there will be persuasive arguments for the seriousness of future threats. As a result, new projects may be started, causing RDT&E funding to grow. In a period of declining budgets, the proponents of funding for major systems can fend off requests for new RDT&E projects because future threats are never completely clear. As a result, RDT&E funds will decline in these periods.

In recent years, however, proponents of development funding seem to have waged successful battles for higher shares of funding, arguing that development is a relatively inexpensive hedge against today's highly uncertain threats. They point to the extended period between developing and fielding weapons, arguing that DoD should invest in strategies that might prevent the United States from missing war-winning new technologies--such as the tanks and atomic bombs of previous wars. Consequently, development funding has been relatively protected, resulting in an average annual portion of more than 15 percent of the defense budget in the post-Cold War period. Although the Administration expects development's share to fall to about 13 percent by 1999, perhaps suggesting a change in strategy in addition to budget realities, this recently increased share may suggest that even Estimate B underestimates RDT&E.

Military construction is kept at its 1999 levels for both estimates. The appropriation makes up a small share of the budget, so estimates of total spending are not greatly influenced by the methods used to project them. Also, this appropriation may not be influenced as directly by decisions made about weapons procurement or force size as are other parts of the budget.

TOTAL BUDGET

Under the Administration's plan, the Air Force budget decreases from \$75 billion in 1994 to about \$70 billion by 1999 (see Figure 1 on page 2).

Beginning in 2000, CBO's Estimate A of the Administration's plan projects that the Air Force budget could continue to decline modestly to \$68 billion, remaining at approximately that level through 2010. It would decline slightly in mid-decade, reaching about \$67 billion in 2005, then increasing by about a billion and remaining at that level through 2010. The decline at mid-decade would be caused by the expected completion of procurement of the

C-17 airlift aircraft. Under Estimate B, the budget would increase through the early part of the decade, reaching a peak in 2003 of about \$75 billion--about equal to today's funding levels. After a mid-decade dip it would rise again, reaching \$76 billion in 2009, then dropping to \$74 billion as the last F-22 is bought.

Under Estimate A, the Air Force budget would require less funding than the 1999 level, and on average in the 2000-2010 period it would be almost \$2 billion less each year than would be available if budgets were frozen in real terms at the 1999 level. Thus, under optimistic cost assumptions, the Air Force can probably afford the F-22, the last purchases of the C-17, and beginning JAST purchases even if it receives no real increases beyond 1999. In fact, the service could donate as much as \$2 billion per year to deficit reduction, domestic spending, or other service budgets.

Under Estimate B, however, it would be necessary for the Air Force budget to rise. In order to carry out the Administration's plan, annual Air Force budgets would have to be 6 percent greater on average during the 2000-2010 period than the planned 1999 level. In peak years the budget would be about 7 percent to 8 percent higher than that level. Thus, under assumptions that are consistent with experience, the Air Force could not afford to buy the weapons it wants without modest real increases in its budget.

Changes from Earlier CBO Estimates

CBO last published detailed estimates of the Air Force's long-term funding requirements in 1991, based on the Bush Administration's base force plan. In that paper CBO projected that the lower estimate--analytically similar to Estimate A in this memorandum--would average about \$84 billion over the 1998-2010 period, or about \$16 billion more than the current average of Estimate A for about the same period. The higher estimate--comparable to Estimate B--averaged about \$98 billion, \$24 billion more than CBO's current projection.¹⁵ Why were the 1991 estimates so much higher in absolute terms?

Since 1991, plans for the Air Force have undergone a number of changes. First, many programs have been cancelled or curtailed during the 1991-1994 period. In 1991, CBO assumed that the Air Force would develop and buy small intercontinental ballistic missiles and also purchase 75 B-2 bombers. CBO also assumed on the basis of contemporary Air Force plans that the

15. The estimates from the earlier memorandum have been escalated to 1995 dollars in order to be comparable with the 1995 dollar estimates discussed elsewhere in this memorandum.

Multirole Fighter, a JAST predecessor, would enter procurement in 2003, about four years earlier than this estimate assumes that JASTs enter procurement. The annual procurement of Multirole Fighters was also expected to increase to 150 by 2005 and stay at that level through 2010, compared with the maximum annual procurement rate of 48 JASTs assumed here. The Air Force has also seen its force goals and operating costs scaled back during the past four years. The goal for tactical fighter forces under the Bottom-Up Review is 25 percent lower than the goal of the base force. The goal for bomber forces is about two-thirds the size of the base force goal.

In 1991 CBO suggested that the Air Force might be able to support its force requirements if budgets were not cut further and the prices of weapons did not rise. Despite the underlying changes in plans and the absolute changes in funding levels, CBO's current conclusion does not differ greatly from that of its 1991 analysis.

Shares Suggest Further Budgetary Pressure

Even modest additions may be difficult to come by if the budget environment continues to be austere. And the Air Force may confront other budgetary problems as well. During the past five years an average of 56 percent of Air Force funding was devoted to money for operations. The share of funds devoted to the operating budget in the year 2010 would fall to about 51 percent under Estimate B, though it would equal the five-year average in Estimate A. If recent trends represent a changed emphasis on funding for operations, the low share of the operating appropriations may suggest that they are underfunded.

CBO implicitly assumes that during the next decade, all major Air Force procurement will be devoted to tactical aircraft. That is consistent with service and Administration statements about plans and may be a reasonable assumption given changes in the requirements for other types of aircraft. Nevertheless, the Air Force has never before had the luxury of devoting so much of its funding to tactical aircraft, and other requirements could arise during this period.

Decline in Total DoD Budget

As a final possibility, in the long run the total DoD budget may decline below the levels projected for 1999 by the Administration. Pressures to find money for discretionary spending, other legislation, and deficit reduction may lead to further cuts in defense. Defense is also likely to receive smaller funds if the

public and the Congress perceive that the risk from future threats is low. Many defense supporters are convinced that the United States must be able to fight two wars at almost the same time and have argued for increasing defense budgets. But critics have questioned this need. Smaller defense budgets--and smaller forces and slower modernization--may be tolerable if the United States faces the prospect of fighting only one regional conflict at a time.

